Amendments to the Claims

The listing of claims will replace all prior versions, and listings, of claims in the

application:

Listing of Claims:

1. (Currently Amended) A transporter for transporting a load over a surface, the
transporter comprising:

a support platform for supporting the load, the support platform characterized by a
fore-aft axis, a lateral axis, and an orientation with respect to the surface, the orientation
referred to as an attitude;

at least one ground-contacting element coupled to the support platform in such a
manner that the attitude of the support platform is capable of variation;

a motorized drive arrangement for driving the at least one ground-contacting
elements;

a sensor module for generating a signal characterizing the attitude of the support
platform; and

a controller for commanding the motorized drive arrangement to apply a torque to
one or more of the ground-contacting elements as a function of based at least on the
attitude of the support platform.

2. (Original) The transporter according to claim 1, wherein one or more ground-
contacting elements are flexibly coupled to the support platform in such a manner that the
attitude of the support platform is capable of variation based on a position of a center of
mass of the load relative to the at least one ground-contacting element.

3. (Original) The transporter according to claim 1, wherein the sensor module includes
at least one distance sensor for measuring a distance characteristic of the attitude of the
platform.

4. (Original) The transporter according to claim 3, wherein the at least one distance
sensor senses the distance between a fiducial point on the platform and a position on the
surface disposed at a specified angle with respect to the support platform.

5.   (Original) The transporter according to claim 3, further including a first component that remains in a substantially fixed vertical position relative to the surface, wherein the at least one distance sensor senses the distance between a fiducial point on the platform and the first component.

6.   (Original) The transporter according to claim 5, wherein one or more ground contacting elements include a wheel having an axle, and the first component is fixed relative to the axle.

7.   (Original) The transporter according to claim 5, wherein one or more ground contacting elements include a wheel supported by a frame, and the first component is fixed relative to the frame.

8.   (Currently Amended) The transporter according to claim 3̶2̶, wherein the distance sensor is selected from the group of distance sensors consisting of an ultrasonic distance sensor, an acoustic distance sensor, a radar distance sensor, a contact sensor, and an optical distance sensor.

9.   (Original) The transporter according to claim 1, wherein the attitude of the support platform is capable of variation based at least on a signal generated by a remote control device.

10. (Original) The transporter according to claim 9, further including a powered strut coupled to the platform, the powered strut capable of varying the attitude of the support platform based at least on the signal generated by the remote control device.

11. (Original) The transporter according to claim 1, further comprising a user interface, wherein the attitude of the support platform is capable of variation based on a signal generated by the user interface.

12. (Original) The transporter according to claim 1, wherein the controller commands motion in the fore-aft plane.

13. (Original) The transporter according to claim 1, wherein the controller commands motion in the lateral plane.

14. (Currently Amended) A method for controlling a transporter having a support platform for supporting a load, the support platform characterized by an attitude with respect to the surface, the transporter including at least one ground contacting elements flexibly coupled to the support platform in such a manner that the attitude of the platform is capable of variation, the transporter further including a motorized drive arrangement for driving the at least one ground contacting element, the method comprising:

      generating a signal characterizing an attitude of the support platform; and

      commanding the motorized drive arrangement <u>to apply a torque to one or more of the ground-contacting elements as a function of</u> ~~based at least on~~ the attitude.

15. (Original) A method according to claim 14, wherein generating the signal includes measuring a distance characteristic of the attitude of the platform.

16. (Original) A method according to claim 15, wherein generating the signal includes measuring a distance between a fiducial point on the platform and a position on the surface disposed at a specified angle.

17. (Original) A method according to claim 15, wherein generating the signal includes measuring the distance between a fiducial point on the platform and a component on the transporter that remains in a substantially fixed position relative to the surface.

18. (Original) A method according to claim 14, further comprising altering the attitude of the support platform by changing a position of a center-of-mass of the load relative to the at least one ground contacting element.

19. (Original) A method according to claim 14, further comprising altering the attitude of the support platform based at least on a signal generated by a user interface of the transporter.

20. (Original) A method according to claim 14, further comprising altering the attitude of the support platform based at least on a signal generated by a remote control device.

<u>Amendments to the Drawings</u>

The attached sheet of drawings includes changes to Fig. 5. This sheet replaces the original sheet that included Fig. 5. Fig. 5 has been amended to add the remote control device 37.

Attachments: Replacement Sheet